



May 23, 2013
AI# 2638
Incident # TBD
Fund# TBD

Plan for Air Monitoring during the repair of the Exxon Refinery Tail Gas Clean-Up Unit (TGPU)

Site description:

The Exxon Refinery is located at 4045 Scenic Highway, Baton Rouge, LA 70805. The perimeter of this facility is roughly bounded by the Mississippi River on the west, Chippewa Street on the south, Scenic Highway on the east and Gulf States Road on the north. The nearest residential communities are located directly to the south and east of the facility. Beginning May 22, 2013, The Tail Gas Clean-Up Unit will be taken out of service for repairs. Removing this unit from service will require the disposal of hydrogen sulfide and the potential emission of 24 tons/day of sulfur dioxide resulting from the incineration of the hydrogen sulfide.

Ambient air monitoring goals

1. To determine if elevated levels of SO₂ escape from the refinery facility proper
2. To determine what environmental impact, if any, occurs on the neighboring civilian population
3. To establish SO₂ emissions in excess of the facility permit

Monitoring methodology

Hand-held monitoring devices will be used by mobile teams at fixed points along a designated circuit. In the event that LDEQ, USEPA (or EPA START Team) or Exxon Refinery receive an odor complaint the mobile team will also take and record readings from the site identified by the complainant. LDEQ monitoring teams will utilize PortaSens II, AREA RAE meters, and MSA Sirius 4 gas meters and shall record hydrogen sulfide, volatile organic compound (VOC), oxygen and sulfur dioxide readings in parts per million (ppm) at each monitoring point.

The NIOSH and OSHA exposure limits for SO₂ are 2 ppm and 5 ppm respectively. Any monitoring reading of SO₂ of 2 ppm or higher will be reported to the DEQ ER Manager at (225) 202-4345 immediately. ***If SO₂ levels rise to or exceed 4 ppm LDEQ personnel will don respiratory protection and leave the area immediately.***

The monitoring circuit should include a representation of the neighborhoods surrounding the facility and the Exxon monitoring sites provided in the plan submitted to LDEQ (see attached).

The LDEQ Mobile Air Monitoring Laboratory (MAML) is available to conduct continuous SO₂ analysis using its SO₂ Analyzer – API 100A equipment. Air Analysis Staff will determine the appropriate use of this resource.

At this time collecting SO₂ samples for analysis is not within the ability of LDEQ or the EPA START Team. LDEQ will continue to research resources that could possibly provide this ability.

Monitoring schedule

LDEQ will conduct two monitoring circuits between the hours of 8:00 am and 12:00 pm

EPA START Team will conduct three monitoring circuits between the hours of 12:00 pm and 10:00 pm



Exxon monitoring data availability

Exxon shall provide its monitoring data to LDEQ ER Manager and the EPA START Team as soon as possible by email.

LDEQ ER Manager (Peter Ricca)- peter.ricca@la.gov

CRO Manager (Bobby Mayweather) - bobby.mayweather@la.gov

EPA START Team Leader (Jeff Wright)- jeff.wright@westonsolutions.com

LDEQ Monitoring Points associated with the ExxonMobil Refinery SRU Tail Gas Control Device

1. Shada Street at Sanchez Street
2. Shada Street at Scenic Hwy
3. Baton Rouge Avenue at Hollywood Street
4. Baton Rouge Avenue at Evangeline Street
5. Baton Rouge Avenue at Dayton Street
6. Uncas Street at Gordon Street
7. Winborne at Wenonah
8. Chippewa at Scenic Hwy
9. Chippewa at Lockwood
10. Chippewa at Phlox
11. Chippewa at Lupine
12. North 3rd at Choctaw

